

Abstract

The invention disclosed herein simplifies application of physiological sensors to the body. In the preferred embodiment the plurality of physiological sensors are physically attached to the back of a personal digital assistant (PDA). An operator presses the PDA single-handedly against patient's chest in such a manner that sensors are in contact with patient's skin and the PDA display faces the operator. Physiological signals are then visualized on the PDA screen. The sensors include EKG electrodes and acoustic sensors. The "EKG Stethoscope" is used to simultaneously record the audio signal from an acoustic sensor and the corresponding electrical EKG signal from EKG electrodes. The PDA analyzes EKG and acoustic signals. Further, sound from one acoustic sensor is amplified and transmitted to operator's headphones for simultaneous auscultation. Concurrent audio and visual experience greatly enhances the operator's ability to diagnose lung and heart disease. A plurality of acoustic sensors is used to localize intrathoracic sound origin. The operator looks at the PDA display for cues on abnormal sound location and sound characteristics.